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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/892,490

Applicant(s)

PARKHILL ET AL.

Examiner

Ponnoreay Pich

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 14-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 14-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-12 and 14-21 are pending.

Response to Arguments

The 112 and 101 rejections made in the last office action are withdrawn in light of applicant's amendments.

Applicant argues that because Hsu and Lopez are from substantially diverse areas of technology, there would be no motivation for one of ordinary skill in the art to combine their teachings. The examiner respectfully disagrees.

As noted in the recent decision by the Supreme Court in the case of *KSR v. Teleflex*, "When a work is available in one field, design incentives and other market forces can prompt variations of it, either in the same field or in another. If a person of ordinary skill in the art can implement a predictable variation, and would see the benefit of doing so, §103 likely bars its patentability."

Hsu discloses of a certificate generation service, wherein the certificates have a finite lifetime and wherein the certificates could be revoked upon request. Lopez discloses of a different type of service, but those services also have a finite lifetime. A person of ordinary skill would have recognized that the certificate generation service disclosed by Hsu had an easily recognizable problem of what to do with the remaining lifetime of a certificate if the certificate was revoked. Incorporating Lopez's time management teachings for a service within Hsu's invention would yield a predictable result of refunding unused lifetime back into a user's prepaid account. A person of ordinary skill is a person of ordinary creativity, not an automation, thus even though the

type of services provided by the inventions of Hsu and Lopez are different, one of ordinary skill would have readily been able to incorporate Lopez's teachings to modify the invention which provided the type of service disclosed by Hsu.

To argue that one of ordinary skill would not be motivated to combine Hsu and Lopez's teachings just because Hsu is from the cryptographic art while Lopez is from the telephony art transforms a general principle of the Graham analysis into a rigid rule which limits the obviousness inquiry. It is common sense that familiar items may have obvious uses beyond their primary purposes, and a person of ordinary skill often will be able to fit the teachings of multiple patents together like pieces of a puzzle. In this case, one of ordinary skill would readily recognize that the teachings of Lopez can be used in other areas than just the telephony art.

Applicant made the same argument with respect to the combination of Cordery and Lopez. The examiner respectfully traverses for the same reasons discussed above. Cordery, like Hsu, discloses of a certificate generation service and also does not explicitly disclose the same limitations as Hsu. These same limitations were rendered obvious by the additional teachings of Lopez.

Applicant argues that a person of ordinary skill in the art is a person with a Bachelor level degree with a focus on cryptography or security, thus would not be likely to be familiar with telephony, thus would not be familiar with the teachings of Lopez. The examiner agrees that a person of ordinary skill would be someone having at least a Bachelor level degree with focus on cryptography or security. However, the examiner respectfully submits that the person of ordinary skill would also have familiarity with

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business methodologies. Further, there are certain teachings which no matter which field a person is one of ordinary skill in the art in, he/she would have at least some familiarity with. The concept of refunding service credit as taught by Lopez, for example, is something most people would be familiar with because most people have participated in some form of commerce at some point in their life and most likely have gotten a refund for something or at least heard of refunds. The examiner respectfully submits that applicant's position that one of ordinary skill in the art would not be familiar with Lopez's teachings just because it is from the telephony art is too rigid a rule to apply in determining obviousness. It is true that the service provided by Lopez is telephony related. However, the business concept Lopez teaches concerning prepaid accounts and refunding of time or service credit can be applicable in more fields than just telephony. One of ordinary skill would have readily recognized this and applied Lopez's teachings with either Hsu or Cordery to arrive at the claimed invention. The result of incorporating Lopez's teachings within Hsu or Cordery's certificate authority was readily predictable, thus is more likely than not to be barred from patentability under §103.

Applicant's arguments as to whether it would have been obvious to incorporate Peyret's teachings with Cordery and Lopez are moot in view of new rejections presented below.

Applicant argues that because Lopez tracks unallocated funds rather than time, he does not disclose selling a pool of unallocated time. The examiner respectfully disagrees with applicant. As previously discussed, how time is tracked is immaterial.

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Whether the prepaid account disclosed by Lopez keeps track of time in time units or as funds which are then converted into time units for use does not matter. One skilled would readily recognize that if a certain amount of fund is worth a certain amount of time, then whether one kept track of the total amount of time in time units or kept track of how much credit is available for conversion into service time, the end result is the same. Applicant's own specification on page 9, lines 17-19 states that a lifetime any be in any unit. Thus from applicant's own disclosure, it is recognized that keeping track of time in terms of dollars would be equivalent to keeping track of time in hours, minutes, or seconds.

Applicant argues that the notion of time in context of Lopez and in the context of assertions as recited in claim 1 are different. Applicant states that the allocation of funds in a prepaid account to actual usage for a phone call according to the teachings of Lopez is not analogous to the allocation of time to the lifetime of assertions. The examiner respectfully disagrees. Lopez teaches that a preselected portion of talk time is allocated to a subscriber for use in a telephone call (paragraph 22). The type of service that the time is allocated for is different, however, because one of ordinary skill in the art is not an automation and would have ordinary creativity, one of ordinary skill would readily be able to adapt Lopez's teachings of how time is managed and apply it to assertion services in the manner claimed.

Applicant argues that Cordery provides no time tracking whatsoever. The examiner respectfully disagrees. Figure 7A shows a certificate which is generated using Cordery's invention. The certificate has validity dates—this keeps track of the

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amount of time the certificate is useful for providing assertions between the user's name (item 704) and public key (item 708).

As per claim 2, applicant argues that Lopez does not teach the erosion of unallocated time over time. As was explained previously, the examiner believes that the manner in which the limitation is recited is broad enough that one can interpret a portion of the prepaid time disclosed by Lopez being used to make a call as meeting the limitation. Applicant points to what is disclosed in the specification in argument for why one cannot interpret the limitation in this manner. However, as also previously stated, limitations from the specification cannot be read into the claim. The interpretation applied by the examiner, though broad, is reasonable.

Applicant's arguments with respect to claim 3 are moot in view of new rejections presented below.

As per claim 7, applicant essentially argues that the combination of Cordery, Lopez, and Anvekar does not render obvious all limitations recited in claim 7. As previously stated, such an allegation does not comply with 37 CFR 1.111(b) because it does not specifically point out how the language of the claim distinguishes between the claimed invention and the prior art of record. The examiner has explained below why the prior art of record renders obvious the claimed invention.

Applicant's arguments with respect to claim 8 are moot in view of new rejections presented below.

The remaining arguments are dependent on arguments already traversed. As such, the claims to which these arguments are directed are also not allowable over the prior art of record.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 11-12, and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsu et al (US 5,982,898) in view of Lopez et al (US 2002/0103762).

Claims 1-2, 11-12, and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cordery et al (US 5,796,841) in view of Lopez et al (US 2002/0103762).

Claim 1:

Hsu disclose the prior art teaches:

1. Upon request, generating an assertion (i.e. certificate), between a name and a public key, the assertion having a lifetime, during which the assertion is usable to provide an indication that the public key is associated with the name (col 2, line 62-col 3, line 7 and col 3, lines 38-50).
2. Upon request, revoking an assertion (col 3, lines 19-26).

Hsu does not explicitly disclose:

1. Selling a pool of unallocated time available for assertions.
2. Subtracting the lifetime from the unallocated time.
3. Adding any remaining lifetime to the unallocated time.

However, Lopez discloses:

1. Selling a pool of unallocated time, i.e. total prepaid time, that is available for a service (paragraphs 35 and 40).
2. Subtracting the lifetime from the unallocated time (paragraphs 36 and 38).
3. Adding any remaining lifetime to the unallocated time (paragraph 32). *It should be noted that when a portion of the total prepaid time disclosed by Lopez is allocated to a subscriber so that the subscriber may use the service.*

The examiner asserts that a person of ordinary skill in the art at the time applicant's invention was made would be someone with at least a Bachelor of Science level degree in Computer Science, Computer Engineering, or Information Technology with a focus on cryptography and computer security (or an equivalent amount of industry experience) and having familiarity with business methodologies.

At the time applicant's invention was made, it would have been obvious to one of ordinary skilled in the art to incorporate Lopez's teachings within the prior art teachings of Hsu according to the limitations recited in claim 1. Note that while Hsu's teachings is

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directed towards primarily digital certificates, Hsu discloses that the digital certificates are generated by a trusted commercial entity, i.e. certificate authority (col 2, lines 64-66). A person of ordinary skill would most likely be someone who is working for the certificate authority, thus would have technical concerns about the certification process and business concerns with respect to what sort of business model to use in the certificate authority business. As such, one of ordinary skill would have been lead to Lopez's teachings dealing with management of prepaid accounts and would have incorporated Lopez's ideas dealing with prepaid services to improve upon the service of providing certificates.

One skilled would have been motivated to incorporate Lopez's teachings within the invention disclosed by Hsu because Lopez's teachings of refunding unused time would allow the customers of the commercial certificate authorities disclosed by Hsu to not worry about wasting money if a certificate they paid for becomes compromised and they have to cancel the certificate before the time the certificate would naturally expire. One skilled would expect that such a business feature would attract more customers to use the services of the commercial certificate authorities disclosed by Hsu. One skilled should appreciate that commercial entities would be interested in better business models which could potentially increase profits.

Note that claim 1 is also obvious over Hsu and Lopez's teachings because one of ordinary skill would have recognized that the result of combining the two teachings was predictable. In this case, one of ordinary skill would have recognized that the result of combining the two existing prior art teachings would be a certificate authority whose

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customers have prepaid accounts, wherein the credit in each account is used to generate certificates having an expected lifetime and if any of those certificates were revoked before the expected time, any remaining lifetime is refunded into the customer's account. One skilled would recognize that the manner in which one kept track of how much total time is available for the generation of certificates is immaterial. The result would be the same if one kept track of the time in terms of hours, minutes, and seconds or if one were to keep track of an amount of funds/credit available to purchase time for the certification service, wherein a certain amount of fund/time is worth a certain amount of time.

Alternatively, Cordery discloses:

1. Upon request, generating an assertion (i.e. certificate) between a name and a public key, the assertion having a lifetime, during which the assertion is usable to provide an indication that the public key is associated with the name (col 6, line 62-col 7, line 17).
2. Upon request, revoking an assertion (col 8, line 4-22).

Cordery does not explicitly disclose:

1. Selling a pool of unallocated time available for assertions.
2. Subtracting the lifetime from the unallocated time.
3. Adding any remaining lifetime to the unallocated time.

However, as discussed above, these limitations would have been rendered obvious over the additional teachings of Lopez if Lopez's business teachings were used by certificate authorities in their businesses. At the time applicant's invention was made, it would have been obvious to one skilled in the art to combine Cordery and Lopez's teachings according to the limitations recited in claim 1. The rationales for why the claimed invention is obvious over the teachings of Cordery and Lopez is the same as why it was obvious over the teachings of Hsu and Lopez.

Claim 2:

Lopez further discloses eroding unallocated time over time (paragraphs 42-43). The unallocated time being used for to allocate time for services meets the limitation since the unallocated time is does not stay constant and is instead eroded time over time.

Claim 11:

The prior art disclosed by Hsu teaches identifying, from a request for revocation, an assertion between a name and a public key (i.e. certificate), the assertion having a remaining lifetime during which the assertion is usable to provide an indication that the public key is associated with the name (col 3, lines 19-26 and 38-50). The cited passage discusses that certificate is revoked before its natural lifetime is reached due to it becoming compromised or due to a company requesting the revocation, i.e. when company X no longer wishes Alice to have access to company X resources. This implies having to identify the assertion from a request for revocation.

Hsu does not explicitly disclose:

1. Maintaining an unallocated time, the unallocated time being time available for assertions between a name and a public key.
2. Adding the remaining lifetime to the unallocated time.

However, Lopez discloses maintaining an unallocated time, the unallocated time being available for services (paragraph 35). Lopez discloses adding the remaining lifetime to the unallocated time (paragraph 32).

Note that providing a certificate, i.e. assertion between a name and a public key, by a certificate authority is a service provided by a certificate authority. At the time applicant's invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention disclosed by Hsu according to the limitations recited in claim 11 in light of Lopez's teachings. The rationales for why the invention as recited in claim 11 is obvious over Hsu and Lopez are the same as what is discussed in claim 1.

Alternatively, for claim 11, note that Cordery discloses identifying, from a request for revocation, an assertion between a name and a public key to be revoked (col 2, lines 29-47 and col 8, lines 4-17), the assertion having a remaining lifetime during which the assertion is usable to provide an indication that the public key is associated with the name (col 2, lines 42-47 and Fig 7A). Note that the validity date of the certificate indicates the remaining lifetime during which the certificate is usable to provide an indication that the public key of the user is associated with the user's name.

Cordery also does not disclose the same limitations which were not disclosed by Hsu. However, as discussed above, these limitations would have been obvious over the additional teachings of Lopez. It would have been obvious to one of ordinary skill in the art at the time applicant's invention was made in light of Cordery and Lopez's teachings to arrive at the invention claimed in claim 11. The rationales for why the invention as recited in claim 11 is obvious over Cordery and Lopez are the same as what is discussed in claim 1.

Claim 12:

Hsu further discloses wherein the assertion is a public key certificate (col 2, lines 12-2 and col 3, lines 38-49).

Cordery further discloses wherein the assertion is a public key certificate (col 6, line 62-col 7, line 17 and Fig 1).

Claims 17-18:

Claims 17-18 recites limitation substantially similar to what is recited in claims 1-2 respectively and are rejected for much the same reasons given therein.

Claims 3-10, 14-16, and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lopez et al (US 2002/0103762) in view of Cordery et al (US 5,796,841) in further view of Anvekar et al (US 2002/0069188).

Claim 3:

Lopez discloses:

1. A repository containing unallocated time, the unallocated time indicating an amount of time available for services (Fig 4, items 50 and paragraph 50, lines 14-19).
2. A client interface (Fig 4, item 20).
3. A request component operatively coupled to the client interface and to the repository, and adapted to, upon request for a service having a lifetime, deduct the lifetime from the unallocated time (paragraphs 35-36 and 38).
4. A revocation component operatively coupled to the client interface and to the repository and adapted to, upon revocation of a service having a remaining lifetime, add the remaining lifetime to the unallocated time (paragraph 40).
5. Wherein at least one of the repository, the client interface, the purchase component, the request component and the revocation component comprises a hardware component (Fig 4, item 20).

Lopez does not explicitly disclose:

1. The services being assertions between a name and a public key.
2. A purchase component operatively coupled to the client interface and to the repository, and adapted to add bulk lifetime requested through the client interface to the unallocated time.
3. The lifetime of the generated assertion being requested through a client interface.

However, Cordery discloses services being assertions between a name and a public key, i.e. certificates (Fig 1). Cordery discloses the lifetime of a generated assertion being requested through a client interface (col 6, line 62-col 7, line 17 and Fig 2). Cordery also discloses the limitation of wherein at least one of the repository, the client interface, the purchase component, the request component and the revocation component comprises a hardware component (Fig 2).

At the time applicant's invention was made, it would have been obvious to one of ordinary skill in the art to utilize Lopez's teachings within the certificate authority business disclosed by Cordery. One of ordinary skill in the art would recognize that the result of this combination would be a system in which a customer can set up a prepaid account with a certificate authority, the account having a pool of repository containing some means to measure how much time is available for generation of assertions/certificates having a finite lifetime that is dependent on an amount requested by the customer via a client interface. One skilled would recognize that the combination invention would further allow the customer to request that the certificate is revoked via the client interface and any lifetime left over on the revoked certificate is refunded into the client's prepaid account repository. The rationales for why one of ordinary skill would have been motivated to incorporate Lopez's teachings within Cordery's invention is the same as what was discussed in claim 1.

Cordery also does not explicitly disclose a purchase component operatively coupled to the client interface and to the repository, and adapted to add bulk lifetime

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requested through the client interface to the unallocated time. However, Anvekar discloses replenishment of a customer's account by a customer (paragraphs 31 and 35). This implies a customer is able to purchase additional service credit using a client interface and after tendering payment, a purchase component adds additional service credit to the client's account, the balance of which is monitored using a repository. One skilled should appreciate that the purchase component would have to be coupled to the client interface and repository for the purchase component to know how much additional service credit the client wish to purchase and for the purchase component to be able to add the requested amount to the repository.

At the time applicant's invention was made, it would have been obvious based on the additional teachings of Anvekar to further modify the combination invention of Cordery and Lopez according to the limitations recited in claim 3 by adding a purchase component which is operatively coupled to the client interface and repository so that the client may purchase additional bulk lifetime for the customer's account. One of ordinary skill in the art would have modified the combination invention of Cordery and Lopez using Anvekar's teachings in the manner discussed because it is generally more convenient and faster to add additional service credit to an existing account than to set up a new account if the old account does not have sufficient credit.

The claimed invention is also obvious over the additional teachings of Anvekar because Anvekar discloses that the delivery of any service desired by a customer may benefit from his invention (paragraph 21). The service provided by the combination invention of Cordery and Lopez is an assertion/certification generation service where

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the certificate has a finite lifetime, wherein the lifetime is allocated from a bulk lifetime available in a customer's account. One skilled should recognize that based only on the explicit teachings of Cordery and Lopez, the combination invention is a system which is ready for improvement because Cordery and Lopez do not explicitly discuss what happens when the customer's account value falls below a threshold. Using the known technique disclosed by Anvekar within the combination invention would yield a predictable result in which the modified invention would allow a customer to add value to his/her account via a purchase component that is coupled to a client interface and a repository which keeps track of the customer's account value.

Claim 4:

Cordery further discloses wherein the assertion is a public key certificate (col 6, line 62-col 7, line 17 and Fig 1).

Claim 5:

As per claim 5, Lopez and Cordery do not explicitly disclose the system is further adapted to monitor when the unallocated time falls below a threshold, and notify a user associated with the unallocated time if the unallocated time falls below the threshold. However, the limitation is obvious over the teachings of Anvekar (paragraphs 28 and 31). The cited portion of Anvekar discusses monitoring when a customer's account value falls below a threshold and notifying the user associated with the account of the condition so that the user may add more credit to his/her account. From this teaching by Anvekar, it would have been obvious to one of ordinary skill in the art to have the combination invention of Cordery, Lopez, and Anvekar monitor when the unallocated

time falls below a threshold, and notify a user associated with the unallocated time if the unallocated time falls below the threshold. Doing so would ensure that the user's account always has sufficient credit/time available for generation of certificates.

Claim 6:

As per claim 6, Lopez and Cordery do not explicitly disclose wherein the request component determines whether the requested lifetime is greater than the unallocated time, and if the requested lifetime is greater than the unallocated time, presents a user associated with the unallocated time with a set of options for remedying the insufficiency of the unallocated time.

However, Anvekar discloses monitoring the total value of an account and whether the account has sufficient value before allowing service to begin (paragraph 28, lines 1-3). Anvekar further discloses if the account had an insufficient value, alerting the user to this and presenting the user with a set of options for remedying the insufficiency of the account value (paragraph 31, lines 1-5).

From Anvekar's teachings, it would have been obvious to one of ordinary skill in the art to configure the combination invention of Cordery, Lopez, and Anvekar such that the request component determines whether the requested lifetime is greater than the unallocated time, and if the requested lifetime is greater than the unallocated time, presents the user with a set of options for remedying the insufficiency of the unallocated time. Note that doing so would prevent a user from using more time than they have paid for.

Claim 7:

Claim 7 is directed towards a method performed using the system of having limitations as recited in claims 3 and 6 and as such claim 7 is rejected for much the same reasons given therein.

Note that the repository recited in claim 3 is used for maintaining an unallocated time, the unallocated time being available for assertions between a name and a public key. The request component as recited in claim 3 is used for accepting a request for an assertion between a name and a public key, i.e. certificate, and a requested lifetime during which the assertion is usable to provide an indication that the public key is associated with the name. As evidenced by the limitation recited in claim 6, the request component is further used for determining whether the unallocated time is greater than or equal to the requested lifetime and upon determining that the unallocated time is greater than or equal to the requested lifetime, the request component deducts the requested lifetime from the unallocated time.

Claim 8:

Cordery further discloses the further step of forwarding the request for an assertion to an entity responsible for generating assertions (col 6, line 62-col 7, line 2). The cited section discloses that a request via a personal computer 204 is forwarded by the computer 204 to the certificate meter 218. The certificate meter is responsible for generating assertions/certificates.

As per the limitation that the forwarding is done where the unallocated time is greater than or equal to the requested lifetime, it is obvious over Anvekar's teachings that a customer's stored account value must be of sufficient value for a requested

service before a service is provided (paragraphs 28 and 31). From this, it is obvious to one of ordinary skill that the request of the user for an assertion would only be forwarded if the customer's account value have sufficient unallocated time to cover the requested lifetime, i.e. the unallocated time is greater than or equal to the requested time.

Claim 9:

Claim 9 recites a limitation similar to what is recited in claim 4 and is rejected for similar reasons.

Claim 10:

Claim 10 recites a limitation similar to what is recited in claim 2 and is rejected for similar reasons.

Claims 19-21:

Claims 19-21 are directed towards a computer readable medium having instructions stored thereon for implementing the method of claims 7, 9, and 10 respectively and are rejected for the same reasons given in each of claims 7, 9, and 10 respectively.

Claim 14:

Lopez discloses the limitations of:

1. Generating an entry in a repository, the entry including an unallocated time available for services (paragraphs 35 and 38). *The cited sections discloses of a prepaid account having a total amount of prepaid time recorded for the account.*
2. Receiving a request for a service and a requested lifetime (paragraph 35).

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3. Deducting the requested lifetime from the unallocated time in the event that a request for a service is received (paragraph 35).
4. Adding the remaining lifetime to the unallocated time in the event that a service is no longer needed (paragraph 40). *Note that each prepaid user's account have a certain amount of time available for services. In the case of Lopez's invention, the service is phone service. From the prepaid talk time, a lifetime is allocated to a subscriber as needed for a telephone call and after the user is finished with the call, the remaining lifetime which was allocated to the subscriber is returned to the pool of prepaid time in the user's account.*

Lopez does not explicitly disclose:

1. Services being assertions between a name and a public key.
2. Receiving a request for purchase of bulk lifetime.
3. Adding the bulk lifetime to the unallocated time in the event that a request for a purchase of bulk lifetime is received.
4. Receiving an identification of an assertion to be revoked, the assertion having a remaining lifetime.

However, Cordery discloses services being assertions between a name and a public key (Fig 1 and Fig 7A). Cordery discloses receiving an identification of an assertion to be revoked, the assertion having a remaining lifetime (col 2, lines 29-47; col 8, lines 4-14; and Fig 7A). Note that the validity date of the certificate indicates the

remaining lifetime during which the certificate is usable to provide an indication that the public key of the user is associated with the user's name.

At the time applicant's invention was made, it would have been obvious to one of ordinary skill in the art to incorporate Lopez's teachings of prepaid accounts having prepaid time for services within Cordery's invention. One skilled would recognize that doing so would result in a certificate authority system in which a user can request a certificate be generated having a requested lifetime which is deducted from the prepaid account's repository of total lifetime available for certificate generation and upon revocation of a certificate having a lifetime remaining, refunding the remaining lifetime back to the user's account. The rationale for why it would have been obvious to one of ordinary skill to combine Lopez and Cordery's teachings to arrive at the invention discussed is the same as what was given in claim 1.

Further, Anvekar discloses receiving a request for purchase of bulk service credit and adding the requested bulk service credit to the user's prepaid account credit in the event that a request for purchase of bulk service credit is received (paragraphs 31 and 35). Note that in the combination invention of Cordery and Lopez, service credit for generation of a certificate is measured by time. However, one skilled should readily appreciate that one can measure service credit in any units. It is noted that applicant's specification also discloses that time could be measured in any unit (specification page 9, lines 17-19). One could measure time in time units (i.e. minutes, hours, or days) or service credit unit where a certain amount of service credit is worth a certain amount of time.

From the above teachings by Anvekar, it would have been obvious to one of ordinary skill in the art to further modify the combination invention of Cordery and Lopez to arrive that the invention recited in claim 14. The rationale for why it would have been obvious to one of ordinary skill in the art to combine the teachings of Anvekar with the teachings of Cordery and Lopez to arrive at the invention recited in claim 14 is the same as what was discussed in claim 3.

Claims 15-16:

Claims 15 and 16 are directed towards a means plus function version of claims 3 and 5 respectively and are rejected for the same reasons given in claims 3 and 5 respectively.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ponnoreay Pich whose telephone number is 571-272-7962. The examiner can normally be reached on 9:00am-4:30pm Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PP

Ponnoreay Pich
Examiner
Art Unit 2135


KIM VU
SUPERVISORY PATENT EXAMINER
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